This quiz is based on a real patient. Read the information, then use your knowledge and clinical skills to answer the questions. We suggest you use a separate sheet of paper, then compare your answers with those provided at the bottom of the page.

A 14-year-old girl presented with painful swelling of her right lower eyelid. The swelling started seven days earlier, after the eyelid was scratched by a tree branch. There was no other past ocular or medical history. The vision in the left eye was 6/6 unaided, but vision in the right eye could not be assessed because of the swelling.

**Question 1**
What are your initial thoughts on seeing this presentation?

**Question 2**
What could you consider in your differential diagnosis?

**Question 3**
Are there any other examination findings or tests you would like to do?

**Question 4**
Based on your diagnosis, what immediate treatment would you start for this patient?

- a. Monitor over the next few days to see how she progresses
- b. Antibiotic eye ointment
- c. Urgent incision and drainage
- d. Start with oral antibiotics and ask her to come back in three days.

**Question 5**
When considering the differential diagnosis of any presentation it can be helpful to use a mnemonic (a memory aid). One example of this is the phrase ‘Vitamin C & D.’ Each letter in this phrase corresponds to the name of a type of disease process that should be considered when assessing an unusual presentation, such as the one in this quiz. (Note: there can be more than one condition for some of the letters.)

- V: Vascular disease (i.e., to do with blood vessels and blood supply)
- I: Infectious or inflammatory
- T: Traumatic or toxic
- A: Autoimmune or allergy
- M: Metabolic
- I: Iatrogenic (caused by treatment), idiopathic (cause unknown), or inherited (genetic in origin)
- N: Neoplastic (i.e., tumours or cancer)
- C: Congenital (present from birth)
- D: Degenerative

**ANSWERS**

<table>
<thead>
<tr>
<th>Question 5</th>
<th>Answer</th>
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<tbody>
<tr>
<td>Vitamin C &amp; D</td>
<td>A, B, C, D</td>
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1. There is a large swelling of the lower lid, which is tense and very painful. It has only been there for 7 days. It also occurred after some trauma, which makes the diagnosis most likely to be some sort of infection.

2. Lid swelling can be caused by tumours, slowly, over weeks to months (although Merkel cell tumours can develop more rapidly). Vascular disease, such as haemangiomas, can cause lid swelling; however, they would not be expected to develop this rapidly or look like this.

3. It would be helpful to look for swollen lymph glands (lymphadenopathy), e.g., in front of the ear and under the jaw, as this would be consistent with an infection. Other symptoms which would suggest an infection would be a raised white cell count. Some form of treatment under local anaesthesia might be indicated in order to prevent future infections.

**Figure 1** Swelling of the right eyelid in a 14-year-old. GHANA

**Figure 2** The same eye following treatment. GHANA